



STIC Search Report

EIC 3700

STIC Database Tracking Number: 94237

TO: Andres Kashnikow
Location:
Monday, May 19, 2003

Case Serial Number: 09/932471

From: John Sims
Location: EIC 3700
CP2, 2C08
Phone: 308-4836

john.sims@uspto.gov

Search Notes

Extensive patent family; NO LITIGATION FOUND.

SEARCH REQUEST FORM

Scientific and Technical Information Center

Requester's Full Name: Andy KASHNICKOV Examiner #: 60484 Date: 5/16/03
 Art Unit: 3700 Phone Number 303-1137 Serial Number: 09/932,471
 Mail Box and Bldg/Room Location: P2 - 2A01 Results Format Preferred (circle): PAPER DISK E-MAIL

If more than one search is submitted, please prioritize searches in order of need.

Please provide a detailed statement of the search topic; and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: _____

Inventors (please provide full names): _____

Earliest Priority Filing Date: _____

For Sequence Searches Only Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.

LIT SEARCH - US PATENT NO
5,938,568

STAFF USE ONLY

Type of Search

Vendors and cost where applicable

Searcher: _____

NA Sequence (#) _____

STN _____

Searcher Phone #: _____

AA Sequence (#) _____

Dialog _____

Searcher Location: _____

Structure (#) _____

Questel/Orbit _____

Date Searcher Picked Up: _____

Bibliographic _____

Dr. Link _____

Date Completed: _____

Litigation _____

Lexis/Nexis _____

Searcher Prep & Review Time: _____

Fulltext _____

Sequence Systems _____

Clerical Prep Time: _____

Patent Family _____

WWW/Internet _____

Online Time: _____

Other _____

Other (specify) _____

1 of 1 DOCUMENT

UNITED STATES PATENT AND TRADEMARK OFFICE GRANTED PATENT

5938568

August 17, 1999

Exercise methods and apparatus

REISSUE: Reissue Application filed Aug. 17, 2001 (O.G. Mar. 19, 2002) Ex. Gp.: 3733; Re. S.N. 09/065,309, (O.G. March 19, 2002)

APPL-NO: 065309 (00)

FILED-DATE: April 23, 1998

GRANTED-DATE: August 17, 1999

ENGLISH-ABST:

An exercise apparatus includes a foot supporting member having a first end rotatably connected to a crank and a second, opposite end supported by a roller which is selectively movable in a radial direction.

Selected file: PLUSPAT

?us5938568/pn

1/1 PLUSPAT - (C) QUESTEL-ORBIT- image
CPIM (C) Questel-Orbit
PN - US5938568 A 19990817 [US5938568]
TI - (A) Exercise methods and apparatus
IN - (A) MARESH JOSEPH D (US); STEARNS KENNETH W (US)
AP - US6530998 19980423 [1998US-0065309]
FD - Rel. Prov. 60/044,026 19970505 [1997US-P044026]
PR - US4402697P 19970505 [1997US-P044026]
- US6530998 19980423 [1998US-0065309]
IC - (A) A63B-022/06
EC - A63B-023/04B3
ICO - K63B-023/035D
PCL - ORIGINAL (O) : 482051000; CROSS-REFERENCE (X) : 482057000 482070000
DT - Basic
CT - US5242343; US5346447; US5499956; US5549526; US5653662; US5658225;
US5685804; US5762588; US5823917
STG - (A) United States patent
AB - An exercise apparatus includes a foot supporting member having a first
end rotatably connected to a crank and a second, opposite end
supported by a roller which is selectively movable in a radial
direction.

1/1 LGST - (C) LEGSTAT
PN - US 5938568 [US5938568]
AP - US 65309/98 19980423 [1998US-0065309]
DT - US-P
ACT - 19980423 US/AE-A
APPLICATION DATA (PATENT)
{US 65309/98 19980423 [1998US-0065309]}
- 19990817 US/A
PATENT
- 20020319 US/RF
REISSUE APPLICATION FILED
20010817
UP - 2002-14

1/1 CRXX - (C) CLAIMS/RRX
PN - 5,938,568 A 19990817 [US5938568]
PA - Mares, Joseph D; Stearns, Kenneth W
ACT - 20010817 REISSUE REQUESTED
ISSUE DATE OF O.G.: 20020319
REISSUE REQUEST NUMBER: 09/065309
EXAMINATION GROUP RESPONSIBLE FOR REISSUEPROCESS: 3733
Reissue Patent Number:

?fam us5938568/pn

1/44 PLUSPAT - (C) QUESTEL-ORBIT
PN - AU5298799 A 20010820 [AU9952987]
STG - (A) Open to public inspection
TI - (A) Toothpaste composition
PA - (A) SHEMBERG MARKETING CORP; BIXLER HARRIS J
IN - (A) BIXLER HARRIS J; SANCHEZ-ZABALLERO GRECILDA
IC - (A) A61K-007/16
AP - AU5298799 19990817 [1999AU-0052987]
PR - WOIB9901488 19990817 [1999WO-IB01488]
UP - 2001-49

2/44 PLUSPAT - (C) QUESTEL-ORBIT
PN - US6076571 A 20000620 [US6076571]
STG - (A) United States patent
TI - (A) Passthrough assemblies for a chemical protective suit
IN - (A) BURNS KEITH DOUGLAS (US); CULPEPPER EDWARD ALAN (US); RICCIO LOUIS MICHAEL (US)
IC - (A) B65B-001/04
AP - US23821499 19990127 [1999US-0238214]
PR - US23821499 19990127 [1999US-0238214]
- US7276598 19980505 [1998US-0072765]
EC - A62B-017/00H
PCL - ORIGINAL (O) : 141383000; CROSS-REFERENCE (X) : 141311000R 141384000
285206000
DT - Basic
UP - 2000-26

3/44 PLUSPAT - (C) QUESTEL-ORBIT
PN - US5997445 A 19991207 [US5997445]
STG - (A) United States patent
TI - (A) Elliptical exercise methods and apparatus
IN - (A) STEARNS KENNETH W (US); MARESH JOSEPH D (US)
IC - (A) A63B-022/00 A63B-069/16
AP - US24550899 19990205 [1999US-0245508]
PR - US24550899 19990205 [1999US-0245508]
- WOIB9901488 19990817 [1999WO-IB01488]
- US91420697 19970819 [1997US-0914206]
- US95330897 19971017 [1997US-0953308]
- US6530898 19980423 [1998US-0065308]
- US9288098P 19980715 [1998US-P092880]
- US10244498P 19980930 [1998US-P102444]
EC - A63B-023/04B3
PCL - ORIGINAL (O) : 482070000; CROSS-REFERENCE (X) : 482051000
DT - Basic

4/44 PLUSPAT - (C) QUESTEL-ORBIT- image
CPIM (C) Questel-Orbit
PN - US6135923 A 20001024 [US6135923]
STG - (A) United States patent
TI - (A) Exercise methods and apparatus
IN - (A) STEARNS KENNETH W (US); MARESH JOSEPH D (US)
IC - (A) A63B-022/00 A63B-022/12
AP - US27386199 19990322 [1999US-0273861]
PR - US27386199 19990322 [1999US-0273861]

- US6530898 19980423 [1998US-0065308]
- US10244498P 19980930 [1998US-P102444]
EC - A63B-023/04B3
PCL - ORIGINAL (O) : 482051000; CROSS-REFERENCE (X) : 482052000 482062000
DT - Basic
UP - 2000-44

5/44 PLUSPAT - (C) QUESTEL-ORBIT
PN - US6254514 B1 20010703 [US6254514]
STG - (B1) U.S. Patent (no pre-grant pub.) after Jan. 2, 2001
TI - (B1) Exercise methods and apparatus
IN - (B1) STEARNS KENNETH W (US); MARESH JOSEPH D (US)
IC - (B1) A63B-022/04 A63B-069/16
AP - US29043999 19990413 [1999US-0290439]
PR - US29043999 19990413 [1999US-0290439]
- US83999097 19970424 [1997US-0839990]
EC - A63B-023/04B3
PCL - ORIGINAL (O) : 482052000; CROSS-REFERENCE (X) : 482051000 482070000
DT - Corresponding document
UP - 2001-28

6/44 PLUSPAT - (C) QUESTEL-ORBIT
PN - US6217485 B1 20010417 [US6217485]
STG - (B1) U.S. Patent (no pre-grant pub.) after jan. 2, 2001
TI - (B1) Elliptical exercise methods and apparatus
IN - (B1) MARESH JOSEPH D (US)
IC - (B1) A63B-022/00 A63B-022/12
AP - US29502199 19990420 [1999US-0295021]
PR - US29502199 19990420 [1999US-0295021]
- US95330897 19971017 [1997US-0953308]
- US49737795 19950630 [1995US-0497377]
EC - A63B-023/04B3
ICO - K63B-023/035A4B2
PCL - ORIGINAL (O) : 482052000; CROSS-REFERENCE (X) : 482051000 482070000
DT - Corresponding document
UP - 2001-19

7/44 PLUSPAT - (C) QUESTEL-ORBIT
PN - US6387017 B1 20020514 [US6387017]
STG - (B1) U.S. Patent (no pre-grant pub.) after Jan. 2, 2001
TI - (B1) Four bar exercise machine
IN - (B1) MARESH JOSEPH D (US)
IC - (B1) A63B-022/04 A63B-069/16
AP - US30054599 19990427 [1999US-0300545]
PR - US30054599 19990427 [1999US-0300545]
- US91420697 19970819 [1997US-0914206]
- US49737795 19950630 [1995US-0497377]
EC - A63B-023/04B3
ICO - K63B-023/035A4B2
PCL - ORIGINAL (O) : 482057000; CROSS-REFERENCE (X) : 482051000
DT - Corresponding document
UP - 2002-21

8/44 PLUSPAT - (C) QUESTEL-ORBIT
PN - US6409635 B1 20020625 [US6409635]
STG - (B1) U.S. Patent (no pre-grant pub.) after Jan. 2, 2001
TI - (B1) Recumbent exercise apparatus with elliptical motion

IN - (B1) STEARNS KENNETH W (US); MARESH JOSEPH D (US)
IC - (B1) A63B-022/00 A63B-069/16
AP - US37478399 19990816 [1999US-0374783]
PR - US37478399 19990816 [1999US-0374783]
- US91427897 19970819 [1997US-0914278]
- US49737795 19950630 [1995US-0497377]
EC - A63B-023/04B3
ICO - K63B-023/035A4B2
PCL - ORIGINAL (O) : 482057000; CROSS-REFERENCE (X) : 482051000
DT - Corresponding document
UP - 2002-27

9/44 PLUSPAT - (C) QUESTEL-ORBIT
PN - US6379285 B1 20020430 [US6379285]
STG - (B1) U.S. Patent (no pre-grant pub.) after Jan. 2, 2001
TI - (B1) Exercise apparatus and methods involving a transformable seat
IN - (B1) STEARNS KENNETH W (US); MARESH JOSEPH D (US)
IC - (B1) A63B-022/06
AP - US38655099 19990831 [1999US-0386550]
PR - US38655099 19990831 [1999US-0386550]
- US4495997P 19970426 [1997US-P044959]
PCL - ORIGINAL (O) : 482057000; CROSS-REFERENCE (X) : 482051000 482908000
UP - 2002-19

10/44 PLUSPAT - (C) QUESTEL-ORBIT
PN - US6248044 B1 20010619 [US6248044]
STG - (B1) U.S. Patent (no pre-grant pub.) after Jan. 2, 2001
TI - (B1) Elliptical exercise methods and apparatus
IN - (B1) STEARNS KENNETH W (US); MARESH JOSEPH D (US)
IC - (B1) A63B-022/00 A63B-069/16
AP - US45473899 19991206 [1999US-0454738]
PR - US45473899 19991206 [1999US-0454738]
- US24550899 19990205 [1999US-0245508]
- US6530898 19980423 [1998US-0065308]
- US91420697 19970819 [1997US-0914206]
- US95330897 19971017 [1997US-0953308]
- US9288098P 19980715 [1998US-P092880]
- US10244498P 19980930 [1998US-P102444]
EC - A63B-023/04B3
ICO - K63B-023/035A4B2
PCL - ORIGINAL (O) : 482052000; CROSS-REFERENCE (X) : 482051000 482070000
DT - Corresponding document
UP - 2001-27

11/44 PLUSPAT - (C) QUESTEL-ORBIT- image
CPIM (C) Questel-Orbit
PN - US5935046 A 19990810 [US5935046]
STG - (A) United States patent
TI - (A) Variable motion elliptical exercise machine
IN - (A) MARESH JOSEPH D (US)
IC - (A) A63B-022/00 A63B-023/10
AP - US4764198 19980325 [1998US-0047641]
PR - US4764198 19980325 [1998US-0047641]
- US50393195 19950719 [1995US-0503931]
EC - A63B-022/08
ICO - K63B-021/05
- K63B-021/22F

- K63B-022/06A9
PCL - ORIGINAL (O) : 482057000; CROSS-REFERENCE (X) : 482052000
DT - Corresponding document

12/44 PLUSPAT - (C) QUESTEL-ORBIT
PN - US2002198084 A1 20021226 [US20020198084]
STG - (A1) Utility Patent Application published on or after January 2, 2001
TI - (A1) Exercise methods and apparatus with [an adjustable] a peripherally supported crank
IN - (A1) STEARNS KENNETH W (US); MARESH JOSEPH D (US)
IC - (A1) A63B-022/04 A63B-022/06 A63B-069/16
AP - US4794302 20020115 [2002US-0047943]
PR - US4794302 20020115 [2002US-0047943]
- US51002900 20000222 [2000US-0510029]
- US94950897 19971014 [1997US-0949508]
- US4495997P 19970426 [1997US-P044959]
- US4496197P 19970426 [1997US-P044961]
- US4402697P 19970505 [1997US-P044026]
PCL - ORIGINAL (O) : 482057000; CROSS-REFERENCE (X) : 482052000
UP - 2003-02

13/44 PLUSPAT - (C) QUESTEL-ORBIT- image
CPIM (C) Questel-Orbit
PN - US5707321 A 19980113 [US5707321]
STG - (A) United States patent
TI - (A) Four bar exercise machine
IN - (A) MARESH JOSEPH DOUGLAS (US)
IC - (A) A63B-022/00
AP - US49737795 19950630 [1995US-0497377]
PR - US49737795 19950630 [1995US-0497377]
EC - A63B-023/04B3
ICO - K63B-023/035A4B2
- K63B-023/035D
PCL - ORIGINAL (O) : 482057000; CROSS-REFERENCE (X) : 482051000
DT - Basic

14/44 PLUSPAT - (C) QUESTEL-ORBIT- image
CPIM (C) Questel-Orbit
PN - US5735774 A 19980407 [US5735774]
STG - (A) United States patent
TI - (A) Active crank axis cycle mechanism
IN - (A) MARESH JOSEPH DOUGLAS (US)
IC - (A) A63B-022/00 A63B-023/10
AP - US50393195 19950719 [1995US-0503931]
PR - US50393195 19950719 [1995US-0503931]
EC - A63B-022/08
ICO - K63B-021/05
- K63B-021/22F
- K63B-022/06A9
PCL - ORIGINAL (O) : 482057000; CROSS-REFERENCE (X) : 482052000
DT - Basic

15/44 PLUSPAT - (C) QUESTEL-ORBIT
PN - US6338698 B1 20020115 [US6338698]
STG - (B1) U.S. Patent (no pre-grant pub.) after Jan. 2, 2001
TI - (B1) Exercise method and apparatus with an adjustable crank
IN - (B1) STEARNS KENNETH W (US); MARESH JOSEPH D (US)

IC - (B1) A63B-022/04 A63B-069/16
AP - US51002900 20000222 [2000US-0510029]
PR - US51002900 20000222 [2000US-0510029]
- US6436898 19980422 [1998US-0064368]
- US94950897 19971014 [1997US-0949508]
- US4402697P 19970505 [1997US-P044026]
- US4495997P 19970426 [1997US-P044959]
- US4496197P 19970426 [1997US-P044961]
PCL - ORIGINAL (O) : 482052000; CROSS-REFERENCE (X) : 482051000
UP - 2002-04

16/44 PLUSPAT - (C) QUESTEL-ORBIT
PN - US6248045 B1 20010619 [US6248045]
STG - (B1) U.S. Patent (no pre-grant pub.) after Jan. 2, 2001
TI - (B1) Exercise method and apparatus
IN - (B1) STEARNS KENNETH W (US); MARESH JOSEPH D (US)
IC - (B1) A63B-022/00
AP - US51003000 20000222 [2000US-0510030]
PR - US51003000 20000222 [2000US-0510030]
- US94646097 19971007 [1997US-0946460]
- US4225797P 19970331 [1997US-P042257]
- US4495997P 19970426 [1997US-P044959]
PCL - ORIGINAL (O) : 482052000; CROSS-REFERENCE (X) : 482051000 482057000
UP - 2001-27

17/44 PLUSPAT - (C) QUESTEL-ORBIT
PN - US6206804 B1 20010327 [US6206804]
STG - (B1) U.S. Patent (no pre-grant pub.) after Jan. 2, 2001
TI - (B1) Exercise methods and apparatus
IN - (B1) MARESH JOSEPH D (US)
IC - (B1) A63B-022/00 A63B-023/10
AP - US5464398 19980403 [1998US-0054643]
PR - US5464398 19980403 [1998US-0054643]
- US50393195 19950719 [1995US-0503931]
- US4495797P 19970426 [1997US-P044957]
- US4495997P 19970426 [1997US-P044959]
- US4495697P 19970426 [1997US-P044956]
PCL - ORIGINAL (O) : 482052000; CROSS-REFERENCE (X) : 482051000
UP - 2001-14

18/44 PLUSPAT - (C) QUESTEL-ORBIT
PN - US6416442 B1 20020709 [US6416442]
STG - (B1) U.S. Patent (no pre-grant pub.) after Jan. 2, 2001
TI - (B1) Elliptical exercise method and apparatus
IN - (B1) STEARNS KENNETH W (US); MARESH JOSEPH D (US)
IC - (B1) A63B-022/64
AP - US55843800 20000425 [2000US-0558438]
PR - US55843800 20000425 [2000US-0558438]
- US99175797 19971216 [1997US-0991757]
- US4402697P 19970505 [1997US-P044026]
PCL - ORIGINAL (O) : 482052000; CROSS-REFERENCE (X) : 482057000 482070000
UP - 2002-29

19/44 PLUSPAT - (C) QUESTEL-ORBIT
PN - US6196948 B1 20010306 [US6196948]
STG - (B1) U.S. Patent (no pre-grant pub.) after Jan. 2, 2001
TI - (B1) Elliptical exercise methods and apparatus

IN - (B1) STEARNS KENNETH W (US); MARESH JOSEPH D (US)
IC - (B1) A63B-022/04 A63B-069/16
AP - US56155300 20000428 [2000US-0561553]
PR - US56155300 20000428 [2000US-0561553]
- US7276598 19980505 [1998US-0072765]
- US27386199 19990322 [1999US-0273861]
PCL - ORIGINAL (O) : 482052000; CROSS-REFERENCE (X) : 482051000 482070000
UP - 2001-14

20/44 PLUSPAT - (C) QUESTEL-ORBIT
PN - US6251047 B1 20010626 [US6251047]
STG - (B1) U.S. Patent (no pre-grant pub.) after Jan. 2, 2001
TI - (B1) Exercise apparatus with elevating seat
IN - (B1) STEARNS KENNETH W (US); MARESH JOSEPH D (US)
IC - (B1) A63B-023/04
AP - US57546800 20000522 [2000US-0575468]
PR - US57546800 20000522 [2000US-0575468]
- US6614198 19980424 [1998US-0066141]
- US4495997P 19970426 [1997US-P044959]
PCL - ORIGINAL (O) : 482004000; CROSS-REFERENCE (X) : 482057000
UP - 2001-27

21/44 PLUSPAT - (C) QUESTEL-ORBIT- image
CPIM (C) Questel-Orbit
PN - US6027431 A 20000222 [US6027431]
STG - (A) United States patent
TI - (A) Exercise methods and apparatus with an adjustable crank
IN - (A) STEARNS KENNETH W (US); MARESH JOSEPH D (US)
IC - (A) A63B-022/04 A63B-069/16
AP - US6436898 19980422 [1998US-0064368]
PR - US6436898 19980422 [1998US-0064368]
- US94950897 19971014 [1997US-0949508]
- US4495997P 19970426 [1997US-P044959]
- US4496197P 19970426 [1997US-P044961]
- US4402697P 19970505 [1997US-P044026]
PCL - ORIGINAL (O) : 482052000; CROSS-REFERENCE (X) : 482051000 482057000
DT - Basic
UP - 2000-10

22/44 PLUSPAT - (C) QUESTEL-ORBIT
PN - US6113518 A 20000905 [US6113518]
STG - (A) United States patent
TI - (A) Exercise methods and apparatus with flexible rocker link
IN - (A) MARESH JOSEPH D (US); STEARNS KENNETH W (US)
IC - (A) A63B-022/00 A63B-022/12
AP - US6439298 19980422 [1998US-0064392]
PR - US6439298 19980422 [1998US-0064392]
- US4496097P 19970426 [1997US-P044960]
EC - A63B-023/04B3
PCL - ORIGINAL (O) : 482052000; CROSS-REFERENCE (X) : 482051000
DT - Basic
UP - 2000-35

23/44 PLUSPAT - (C) QUESTEL-ORBIT- image
CPIM (C) Questel-Orbit
PN - US5882281 A 19990316 [US5882281]
STG - (A) United States patent

TI - (A) Exercise methods and apparatus
IN - (A) STEARNS KENNETH W (US); MARESH JOSEPH D (US)
IC - (A) A63B-022/00 A63B-069/16
AP - US6439398 19980422 [1998US-0064393]
PR - US6439398 19980422 [1998US-0064393]
- US83999197 19970424 [1997US-0839991]
ICO - K63B-023/035A4B4
- K63B-023/04A4
PCL - ORIGINAL (O) : 482051000; CROSS-REFERENCE (X) : 482070000
DT - Basic

24/44 PLUSPAT - (C) QUESTEL-ORBIT- image
CPIM (C) Questel-Orbit
PN - US5938568 A 19990817 [US5938568]
STG - (A) United States patent
TI - (A) Exercise methods and apparatus
IN - (A) MARESH JOSEPH D (US); STEARNS KENNETH W (US)
IC - (A) A63B-022/06
AP - US6530998 19980423 [1998US-0065309]
PR - US4402697P 19970505 [1997US-P044026]
- US6530998 19980423 [1998US-0065309]
EC - A63B-023/04B3
ICO - K63B-023/035D
PCL - ORIGINAL (O) : 482051000; CROSS-REFERENCE (X) : 482057000 482070000
DT - Basic

25/44 PLUSPAT - (C) QUESTEL-ORBIT
PN - US6066073 A 20000523 [US6066073]
STG - (A) United States patent
TI - (A) Exercise apparatus with elevating seat
IN - (A) STEARNS KENNETH W (US); MARESH JOSEPH D (US)
IC - (A) A63B-023/04
AP - US6614198 19980424 [1998US-0066141]
PR - US6614198 19980424 [1998US-0066141]
- US4495997P 19970426 [1997US-P044959]
PCL - ORIGINAL (O) : 482004000; CROSS-REFERENCE (X) : 482057000
DT - Basic
UP - 2000-22

26/44 PLUSPAT - (C) QUESTEL-ORBIT- image
CPIM (C) Questel-Orbit
PN - US5944638 A 19990831 [US5944638]
STG - (A) United States patent
TI - (A) Exercise apparatus and methods involving a flywheel
IN - (A) MARESH JOSEPH D (US); STEARNS KENNETH W (US)
IC - (A) A63B-022/06
AP - US6614298 19980424 [1998US-0066142]
PR - US4495997P 19970426 [1997US-P044959]
- US6614298 19980424 [1998US-0066142]
EC - A63B-022/08
ICO - K63B-021/015
- K63B-021/22F
- K63B-208/02E2
- K63B-208/02E4
PCL - ORIGINAL (O) : 482063000; CROSS-REFERENCE (X) : 482057000 482110000
482903000
DT - Basic

27/44 PLUSPAT - (C) QUESTEL-ORBIT- image
CPIM (C) Questel-Orbit
PN - US6126574 A 20001003 [US6126574]
STG - (A) United States patent
TI - (A) Exercise method and apparatus
IN - (A) STEARNS KENNETH W (US); MARESH JOSEPH D (US)
IC - (A) A63B-022/00
AP - US6614398 19980424 [1998US-0066143]
PR - US6614398 19980424 [1998US-0066143]
- US83999197 19970424 [1997US-0839991]
- US4495597P 19970426 [1997US-P044955]
- US4402697P 19970505 [1997US-P044026]
- US4496097P 19970426 [1997US-P044960]
- US4496197P 19970426 [1997US-P044961]
- US4496297P 19970426 [1997US-P044962]
EC - A63B-023/04B3
ICO - K63B-023/035A4B4
PCL - ORIGINAL (O) : 482052000; CROSS-REFERENCE (X) : 482057000
DT - Corresponding document
UP - 2000-39

28/44 PLUSPAT - (C) QUESTEL-ORBIT
PN - US6171215 B1 20010109 [US6171215]
STG - (B1) U.S. Patent (no pre-grant pub.) after jan. 2, 2001
TI - (B1) Exercise methods and apparatus
IN - (B1) STEARNS KENNETH W (US); MARESH JOSEPH D (US)
IC - (B1) A63B-022/04
AP - US7276598 19980505 [1998US-0072765]
PR - US7276598 19980505 [1998US-0072765]
- US83999097 19970424 [1997US-0839990]
- US6439398 19980422 [1998US-0064393]
- US6750497P 19971204 [1997US-P067504]
- US7570298P 19980224 [1998US-P075702]
- US7570398P 19980224 [1998US-P075703]
PCL - ORIGINAL (O) : 482051000; CROSS-REFERENCE (X) : 482070000
UP - 2001-13

29/44 PLUSPAT - (C) QUESTEL-ORBIT
PN - US6053847 A 20000425 [US6053847]
STG - (A) United States patent
TI - (A) Elliptical exercise method and apparatus
IN - (A) STEARNS KENNETH W (US); MARESH JOSEPH D (US)
IC - (A) A63B-022/04 A63B-069/16
AP - US7276798 19980505 [1998US-0072767]
PR - US7276798 19980505 [1998US-0072767]
- US99175797 19971216 [1997US-0991757]
- US4402697P 19970505 [1997US-P044026]
EC - A63B-023/04B3
PCL - ORIGINAL (O) : 482051000; CROSS-REFERENCE (X) : 482070000
DT - Basic
UP - 2000-17

30/44 PLUSPAT - (C) QUESTEL-ORBIT
PN - US2001016541 A1 20010823 [US20010016541]
STG - (A1) Utility Patent Application published on or after January 2, 2001
TI - (A1) Exercise methods and apparatus

IN - (A1) STEARNS KENNETH W (US); MARESH JOSEPH D (US)
IC - (A1) A63B-022/04 A63B-022/06 A63B-069/16
PN2 - US6461277 B2 20021008 [US6461277]
STG2- (B2) U.S. Patent (with pre-grant pub.) after Jan. 2, 2001
TI2 - (B2) Exercise methods and apparatus
IN2 - (B2) STEARNS KENNETH W (US); MARESH JOSEPH D (US)
IC2 - (B2) A63B-022/00 A63B-069/16
AP - US74839400 20001226 [2000US-0748394]
PR - US74839400 20001226 [2000US-0748394]
- US6530898 19980423 [1998US-0065308]
- US4496197P 19970426 [1997US-P044961]
PCL - ORIGINAL (O) : 482052000; CROSS-REFERENCE (X) : 482051000 482070000
UP - 2001-36

31/44 PLUSPAT - (C) QUESTEL-ORBIT
PN - US2001001304 A1 20010517 [US20010001304]
STG - (A1) Utility Patent Application published on or after January 2, 2001
TI - (A1) Exercise methods and apparatus
IN - (A1) STEARNS KENNETH W (US); MARESH JOSEPH D (US)
IC - (A1) A61H-003/00
AP - US74839500 20001226 [2000US-0748395]
PR - US74839500 20001226 [2000US-0748395]
- US29043999 19990413 [1999US-0290439]
- US83999097 19970424 [1997US-0839990]
EC - A63B-023/04B3
PCL - ORIGINAL (O) : 482066000; CROSS-REFERENCE (X) : 482070000
DT - Corresponding document
UP - 2001-22

32/44 PLUSPAT - (C) QUESTEL-ORBIT
PN - US2001001305 A1 20010517 [US20010001305]
STG - (A1) Utility Patent Application published on or after January 2, 2001
TI - (A1) Exercise methods and apparatus
IN - (A1) STEARNS KENNETH W (US); MARESH JOSEPH D (US)
IC - (A1) A61H-003/00
PN2 - US6554750 B2 20030429 [US6554750]
STG2- (B2) U.S. Patent (with pre-grant pub.) after Jan. 2, 2001
TI2 - (B2) Exercise methods and apparatus
IN2 - (B2) STEARNS KENNETH W (US); MARESH JOSEPH D (US)
IC2 - (B2) A63B-069/16
AP - US74839600 20001226 [2000US-0748396]
PR - US74839600 20001226 [2000US-0748396]
- US7276598 19980505 [1998US-0072765]
- US83999097 19970424 [1997US-0839990]
- US6439398 19980422 [1998US-0064393]
- US6750497P 19971204 [1997US-P067504]
- US7570298P 19980224 [1998US-P075702]
- US7570398P 19980224 [1998US-P075703]
PCL - ORIGINAL (O) : 482057000; CROSS-REFERENCE (X) : 482051000 482052000
UP - 2001-22

33/44 PLUSPAT - (C) QUESTEL-ORBIT
PN - US2002016236 A1 20020207 [US20020016236]
STG - (A1) Utility Patent Application published on or after January 2, 2001
TI - (A1) Exercise apparatus with elevating seat
IN - (A1) STEARNS KENNETH W (US); MARESH JOSEPH D (US)
IC - (A1) A63B-022/06

PN2 - US6419613 B2 20020716 [US6419613]
STG2- (B2) U.S. Patent (with pre-grant pub.) after Jan. 2, 2001
TI2 - (B2) Exercise apparatus with elevating seat
IN2 - (B2) STEARNS KENNETH W (US); MARESH JOSEPH D (US)
IC2 - (B2) A63B-023/04
AP - US79612301 20010228 [2001US-0796123]
PR - US79612301 20010228 [2001US-0796123]
- US57546800 20000522 [2000US-0575468]
- US6614198 19980424 [1998US-0066141]
PCL - ORIGINAL (O) : 482057000; CROSS-REFERENCE (X) : 482004000
UP - 2002-07

34/44 PLUSPAT - (C) QUESTEL-ORBIT
PN - US2001056010 A1 20011227 [US20010056010]
STG - (A1) Utility Patent Application published on or after January 2, 2001
TI - (A1) Elliptical exercise methods and apparatus
IN - (A1) STEARNS KENNETH W (US); MARESH JOSEPH D (US)
IC - (A1) A63B-022/04
AP - US83581001 20010416 [2001US-0835810]
PR - US83581001 20010416 [2001US-0835810]
- US29502199 19990420 [1999US-0295021]
- US95330897 19971017 [1997US-0953308]
- US49737795 19950630 [1995US-0497377]
EC - A63B-023/04B3
ICO - K63B-023/035A4B2
PCL - ORIGINAL (O) : 482052000
DT - Corresponding document
UP - 2002-08

35/44 PLUSPAT - (C) QUESTEL-ORBIT- image
CPIM (C) Questel-Orbit
PN - US5893820 A 19990413 [US5893820]
STG - (A) United States patent
TI - (A) Exercise methods and apparatus
IN - (A) MARESH JOSEPH D (US); STEARNS KENNETH W (US)
IC - (A) A63B-022/04 A63B-069/16
AP - US83999097 19970424 [1997US-0839990]
PR - US83999097 19970424 [1997US-0839990]
EC - A63B-023/04B3
ICO - K63B-023/035D
PCL - ORIGINAL (O) : 482051000; CROSS-REFERENCE (X) : 482057000 482070000
DT - Basic

36/44 PLUSPAT - (C) QUESTEL-ORBIT- image
CPIM (C) Questel-Orbit
PN - US5803871 A 19980908 [US5803871]
STG - (A) United States patent
TI - (A) Exercise methods and apparatus
IN - (A) STEARNS KENNETH W (US); MARESH JOSEPH D (US)
IC - (A) A63B-022/00 A63B-069/16
AP - US83999197 19970424 [1997US-0839991]
PR - US83999197 19970424 [1997US-0839991]
EC - A63B-023/04B3
ICO - K63B-023/035A4B4
- K63B-023/035D
PCL - ORIGINAL (O) : 482052000; CROSS-REFERENCE (X) : 482051000 482070000
DT - Basic

37/44 PLUSPAT - (C) QUESTEL-ORBIT
PN - US2002094914 A1 20020718 [US2002094914]
STG - (A1) Utility Patent Application published on or after January 2, 2001
TI - (A1) Exercise methods and apparatus
IN - (A1) KRULL MARK A (US); MARESH JOSEPH D (US)
IC - (A1) A63B-022/00 A63B-022/04 A63B-071/00
AP - US88768301 20010327 [2001US-0887683]
PR - US88768301 20010327 [2001US-0887683]
- US5464398 19980403 [1998US-0054643]
- US50393195 19950719 [1995US-0503931]
EC - A63B-022/08
ICO - K63B-021/05
- K63B-021/22F
PCL - ORIGINAL (O) : 482051000; CROSS-REFERENCE (X) : 482052000
DT - Corresponding document
UP - 2002-30

38/44 PLUSPAT - (C) QUESTEL-ORBIT- image
CPIM (C) Questel-Orbit
PN - US5897463 A 19990427 [US5897463]
STG - (A) United States patent
TI - (A) Four bar exercise machine
IN - (A) MARESH JOSEPH D (US)
IC - (A) A63B-022/00
AP - US91420697 19970819 [1997US-0914206]
PR - US91420697 19970819 [1997US-0914206]
- US49737795 19950630 [1995US-0497377]
EC - A63B-023/04B3
PCL - ORIGINAL (O) : 482070000; CROSS-REFERENCE (X) : 482051000
DT - Basic

39/44 PLUSPAT - (C) QUESTEL-ORBIT- image
CPIM (C) Questel-Orbit
PN - US5938570 A 19990817 [US5938570]
STG - (A) United States patent
TI - (A) Recumbent exercise apparatus with elliptical motion
IN - (A) MARESH JOSEPH D (US)
IC - (A) A63B-022/00
AP - US91427897 19970819 [1997US-0914278]
PR - US49737795 19950630 [1995US-0497377]
- US91427897 19970819 [1997US-0914278]
EC - A63B-023/04B3
ICO - K63B-023/035A4B2
- K63B-023/035D
PCL - ORIGINAL (O) : 482057000; CROSS-REFERENCE (X) : 482062000
DT - Corresponding document

40/44 PLUSPAT - (C) QUESTEL-ORBIT
PN - US2001051562 A1 20011213 [US20010051562]
STG - (A1) Utility Patent Application published on or after January 2, 2001
TI - (A1) Exercise apparatus with elliptical foot motion
IN - (A1) STEARNS KENNETH W (US); MARESH JOSEPH D (US)
IC - (A1) A63B-022/00 A63B-022/04 A63B-069/18 A63B-071/00
AP - US91700201 20010727 [2001US-0917002]
PR - US91700201 20010727 [2001US-0917002]
- US74839600 20001226 [2000US-0748396]

- US7276598 19980505 [1998US-0072765]
- US6439398 19980422 [1998US-0064393]
PCL - ORIGINAL (O) : 482051000; CROSS-REFERENCE (X) : 482052000 482070000
UP - 2002-01

41/44 PLUSPAT - (C) QUESTEL-ORBIT- image
CPIM (C) Questel-Orbit
PN - US6027430 A 20000222 [US6027430]
STG - (A) United States patent
TI - (A) Exercise methods and apparatus
IN - (A) STEARNS KENNETH W (US); MARESH JOSEPH D (US)
IC - (A) A63B-022/04 A63B-069/16
AP - US94646097 19971007 [1997US-0946460]
PR - US94646097 19971007 [1997US-0946460]
- US4225797P 19970331 [1997US-P042257]
- US4495997P 19970426 [1997US-P044959]
EC - A63B-023/04B3
ICO - K63B-022/06A2
PCL - ORIGINAL (O) : 482051000; CROSS-REFERENCE (X) : 482070000
DT - Basic
UP - 2000-10

42/44 PLUSPAT - (C) QUESTEL-ORBIT- image
CPIM (C) Questel-Orbit
PN - US5895339 A 19990420 [US5895339]
STG - (A) United States patent
TI - (A) Elliptical exercise methods and apparatus
IN - (A) MARESH JOSEPH D (US)
IC - (A) A63B-022/00 A63B-022/12
AP - US95330897 19971017 [1997US-0953308]
PR - US49737795 19950630 [1995US-0497377]
- US95330897 19971017 [1997US-0953308]
EC - A63B-023/04B3
ICO - K63B-023/035A4B2
- K63B-023/035D
PCL - ORIGINAL (O) : 482051000; CROSS-REFERENCE (X) : 482070000
DT - Basic

43/44 PLUSPAT - (C) QUESTEL-ORBIT- image
CPIM (C) Questel-Orbit
PN - US5919118 A 19990706 [US5919118]
STG - (A) United States patent
TI - (A) Elliptical exercise methods and apparatus
IN - (A) STEARNS KENNETH W (US); MARESH JOSEPH D (US)
IC - (A) A63B-022/00 A63B-022/04
AP - US99175797 19971216 [1997US-0991757]
PR - US99175797 19971216 [1997US-0991757]
EC - A63B-023/04B3
ICO - K63B-023/035D
PCL - ORIGINAL (O) : 482051000; CROSS-REFERENCE (X) : 482070000
DT - Basic

44/44 PLUSPAT - (C) QUESTEL-ORBIT
PN - WO200158415 A1 20010816 [WO200158415]
STG - (A1) Publ. Of int. Appl. With int. Search rep
TI - (A1) TOOTHPASTE COMPOSITION
OTI - (A1) COMPOSITION DE DENTIFRICE

PA - (A1) SHEMBERG MARKETING CORP (PH); BIXLER HARRIS J (US)
PA0 - SHEMBERG MARKETING CORPORATION; Pakn-an, Mandaue, Cebu (PH)
- BIXLER, Harris, J.; 62 Bayside Road, Northport, ME 04849 (US)
IN - (A1) SANCHEZ-ZABALLERO GRECILDA; BIXLER HARRIS J (US)
IC - (A1) A61K-007/16
LA - ENGLISH (ENG)
AP - WOIB9901488 19990817 [1999WO-IB01488]
PR - WOIB9901488 19990817 [1999WO-IB01488]
- US24550899 19990205 [1999US-0245508]
EC - A63B-023/04B3
DS - AE; AL; AM; AT; AU; AZ; BA; BB; BG; BR; BY; CA; CH; CN; CU; CZ; DE; DK;
EE; ES; FI; GB; GD; GE; GH; GM; HR; HU; ID; IL; IN; IS; JP; KE; KG; KP;
KR; KZ; LC; LK; LR; LS; LT; LU; LV; MD; MG; MK; MN; MW; MX; NO; NZ; PL;
PT; RO; RU; SD; SE; SG; SI; SK; SL; TJ; TM; TR; TT; UA; UG; UZ; VN; YU;
ZA; ZW; European patent (AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR;
IE; IT; LU; MC; NL; PT; SE); OAPI patent (BF; BJ; CF; CG; CI; CM; GA;
GN; GW; ML; MR; NE; SN; TD; TG); ARIPO patent (GH; GM; KE; LS; MW; SD;
SL; SZ; UG; ZW); Eurasian patent (AM; AZ; BY; KG; KZ; MD; RU; TJ; TM)
DT - Corresponding document
UP - 2001-34

1/45 LEGALI - (C) LEGSTAT
PN - US 2002198084 [US20020198084]
AP - US 47943/02 20020115 [2002US-0047943]
DT - US-P
ACTE- 20020115 US/AE-A
APPLICATION DATA (PATENT)
{US 47943/02 20020115 [2002US-0047943]}
- 20021226 US/A1A1
PATENT APPLICATION PUBLICATION (PRE-GRANT)
UP - 2003-03

2/45 LEGALI - (C) LEGSTAT
PN - US 6461277 [US6461277]
AP - US 748394/00 20001226 [2000US-0748394]
DT - US-P
ACTE- 20001226 US/AE-A
APPLICATION DATA (PATENT)
{US 748394/00 20001226 [2000US-0748394]}
- 20021008 US/BB
PATENT (PREVIOUS PRE-GRANT PUBLICATION)
UP - 2002-43

3/45 LEGALI - (C) LEGSTAT
PN - US 2002094914 [US20020094914]
AP - US 887683/01 20010327 [2001US-0887683]
DT - US-P
ACTE- 20010327 US/AE-A
APPLICATION DATA (PATENT)
{US 887683/01 20010327 [2001US-0887683]}
- 20020718 US/A1A1
PATENT APPLICATION PUBLICATION (PRE-GRANT)
UP - 2002-31

4/45 LEGALI - (C) LEGSTAT
PN - US 6419613 [US6419613]

AP - US 796123/01 20010228 [2001US-0796123]
DT - US-P
ACTE- 20010228 US/AE-A
APPLICATION DATA (PATENT)
{US 796123/01 20010228 [2001US-0796123]}
- 20020716 US/BB
PATENT (PREVIOUS PRE-GRANT PUBLICATION)
UP - 2002-30

5/45 LEGALI - (C) LEGSTAT
PN - US 6416442 [US6416442]
AP - US 558438/00 20000425 [2000US-0558438]
DT - US-P
ACTE- 20000425 US/AE-A
APPLICATION DATA (PATENT)
{US 558438/00 20000425 [2000US-0558438]}
- 20020709 US/BA
PATENT (NO PREVIOUS PRE-GRANT PUBLICATION)
UP - 2002-30

6/45 LEGALI - (C) LEGSTAT
PN - US 6409635 [US6409635]
AP - US 374783/99 19990816 [1999US-0374783]
DT - US-P
ACTE- 19990816 US/AE-A
APPLICATION DATA (PATENT)
{US 374783/99 19990816 [1999US-0374783]}
- 20020625 US/BA
PATENT (NO PREVIOUS PRE-GRANT PUBLICATION)
UP - 2002-28

7/45 LEGALI - (C) LEGSTAT
PN - US 6387017 [US6387017]
AP - US 300545/99 19990427 [1999US-0300545]
DT - US-P
ACTE- 19990427 US/AE-A
APPLICATION DATA (PATENT)
{US 300545/99 19990427 [1999US-0300545]}
- 20020514 US/BA
PATENT (NO PREVIOUS PRE-GRANT PUBLICATION)
UP - 2002-23

8/45 LEGALI - (C) LEGSTAT
PN - US 6379285 [US6379285]
AP - US 386550/99 19990831 [1999US-0386550]
DT - US-P
ACTE- 19990831 US/AE-A
APPLICATION DATA (PATENT)
{US 386550/99 19990831 [1999US-0386550]}
- 20020430 US/BA
PATENT (NO PREVIOUS PRE-GRANT PUBLICATION)
UP - 2002-20

9/45 LEGALI - (C) LEGSTAT
PN - US 2001056010 [US20010056010]
AP - US 835810/01 20010416 [2001US-0835810]
DT - US-P

ACTE- 20010416 US/AE-A
APPLICATION DATA (PATENT)
{US 835810/01 20010416 [2001US-0835810] }
- 20011227 US/A1A1
PATENT APPLICATION PUBLICATION (PRE-GRANT)
UP - 2002-09

10/45 LEGALI - (C) LEGSTAT
PN - US 2002016236 [US20020016236]
AP - US 796123/01 20010228 [2001US-0796123]
DT - US-P
ACTE- 20010228 US/AE-A
APPLICATION DATA (PATENT)
{US 796123/01 20010228 [2001US-0796123] }
- 20020207 US/A1A1
PATENT APPLICATION PUBLICATION (PRE-GRANT)
UP - 2002-08

11/45 LEGALI - (C) LEGSTAT
PN - US 6338698 [US6338698]
AP - US 510029/00 20000222 [2000US-0510029]
DT - US-P
ACTE- 20000222 US/AE-A
APPLICATION DATA (PATENT)
{US 510029/00 20000222 [2000US-0510029] }
- 20020115 US/BA
PATENT (NO PREVIOUS PRE-GRANT PUBLICATION)
UP - 2002-05

12/45 LEGALI - (C) LEGSTAT
PN - US 2001051562 [US20010051562]
AP - US 917002/01 20010727 [2001US-0917002]
DT - US-P
ACTE- 20010727 US/AE-A
APPLICATION DATA (PATENT)
{US 917002/01 20010727 [2001US-0917002] }
- 20011213 US/A1A1
PATENT APPLICATION PUBLICATION (PRE-GRANT)
UP - 2002-02

13/45 LEGALI - (C) LEGSTAT
PN - US 2001016541 [US20010016541]
AP - US 748394/00 20001226 [2000US-0748394]
DT - US-P
ACTE- 20001226 US/AE-A
APPLICATION DATA (PATENT)
{US 748394/00 20001226 [2000US-0748394] }
- 20010823 US/A1A1
PATENT APPLICATION PUBLICATION (PRE-GRANT)
UP - 2001-37

14/45 LEGALI - (C) LEGSTAT
PN - WO 200158415 [WO200158415]
AP - WO 9901488/99 (IB) 19990817 [1999WO-IB01488]
DT - WO-P
ACTE- 19990817 WO/AE-A
APPLICATION DATA

{WO 9901488/99(IB) 19990817 [1999WO-IB01488]}

- 20010816 WO/AK-A1 [+]

DESIGNATED STATES CITED IN A PUBLISHED APPLICATION WITH SEARCH REPORT
AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GD
GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD
MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG
UZ VN YU ZA ZW

- 20010816 WO/AL-A1 [+]

DESIGNATED COUNTRIES FOR REGIONAL PATENTS CITED IN A PUBLISHED
APPLICATION WITH SEARCH REPORT

GH GM KE LS MW SD SL SZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH CY
DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN GW
ML MR NE SN TD TG

- 20010816 WO/A1 [+]

PUBLICATION OF THE INTERNATIONAL APPLICATION WITH THE INTERNATIONAL
SEARCH REPORT

- 20011010 WO/121

EP: THE EPO HAS BEEN INFORMED BY WIPO THAT EP WAS DESIGNATED IN THIS
APPLICATION

- 20020318 WO/NENP

NON-ENTRY INTO THE NATIONAL PHASE IN:

<RU>

- 20020725 WO/REG; DE/8642 [-]

DE: IMPACT ABOLISHED FOR DE

<DE>

- 20021002 WO/122 [-]

EP: PCT APP. NOT ENT. EUROP. PHASE

UP - 2003-06

15/45 LEGALI - (C) LEGSTAT

PN - US 6254514 [US6254514]

AP - US 290439/99 19990413 [1999US-0290439]

DT - US-P

ACTE- 19990413 US/AE-A

APPLICATION DATA (PATENT)

{US 290439/99 19990413 [1999US-0290439]}

- 20010703 US/BA

PATENT (NO PREVIOUS PRE-GRANT PUBLICATION)

UP - 2001-29

16/45 LEGALI - (C) LEGSTAT

PN - US 6251047 [US6251047]

AP - US 575468/00 20000522 [2000US-0575468]

DT - US-P

ACTE- 20000522 US/AE-A

APPLICATION DATA (PATENT)

{US 575468/00 20000522 [2000US-0575468]}

- 20010626 US/BA

PATENT (NO PREVIOUS PRE-GRANT PUBLICATION)

UP - 2001-29

17/45 LEGALI - (C) LEGSTAT

PN - US 6248045 [US6248045]

AP - US 510030/00 20000222 [2000US-0510030]

DT - US-P

ACTE- 20000222 US/AE-A

APPLICATION DATA (PATENT)

{US 510030/00 20000222 [2000US-0510030] }
- 20010619 US/BA
PATENT (NO PREVIOUS PRE-GRANT PUBLICATION)
UP - 2001-29

18/45 LEGALI - (C) LEGSTAT
PN - US 6248044 [US6248044]
AP - US 454738/99 19991206 [1999US-0454738]
DT - US-P
ACTE- 19991206 US/AE-A
APPLICATION DATA (PATENT)
{US 454738/99 19991206 [1999US-0454738] }
- 20010619 US/BA
PATENT (NO PREVIOUS PRE-GRANT PUBLICATION)
UP - 2001-29

19/45 LEGALI - (C) LEGSTAT
PN - US 2001001305 [US20010001305]
AP - US 748396/00 20001226 [2000US-0748396]
DT - US-P
ACTE- 20001226 US/AE-A
APPLICATION DATA (PATENT)
{US 748396/00 20001226 [2000US-0748396] }
- 20010517 US/A1A1
PATENT APPLICATION PUBLICATION (PRE-GRANT)
UP - 2001-26

20/45 LEGALI - (C) LEGSTAT
PN - US 2001001304 [US20010001304]
AP - US 748395/00 20001226 [2000US-0748395]
DT - US-P
ACTE- 20001226 US/AE-A
APPLICATION DATA (PATENT)
{US 748395/00 20001226 [2000US-0748395] }
- 20010517 US/A1A1
PATENT APPLICATION PUBLICATION (PRE-GRANT)
UP - 2001-26

21/45 LEGALI - (C) LEGSTAT
PN - US 6217485 [US6217485]
AP - US 295021/99 19990420 [1999US-0295021]
DT - US-P
ACTE- 19990420 US/AE-A
APPLICATION DATA (PATENT)
{US 295021/99 19990420 [1999US-0295021] }
- 20010417 US/BA
PATENT (NO PREVIOUS PRE-GRANT PUBLICATION)
UP - 2001-20

22/45 LEGALI - (C) LEGSTAT
PN - US 6206804 [US6206804]
AP - US 54643/98 19980403 [1998US-0054643]
DT - US-P
ACTE- 19980403 US/AE-A
APPLICATION DATA (PATENT)
{US 54643/98 19980403 [1998US-0054643] }
- 20010327 US/BA

PATENT (NO PREVIOUS PRE-GRANT PUBLICATION)
UP - 2001-16

23/45 LEGALI - (C) LEGSTAT
PN - US 6196948 [US6196948]
AP - US 561553/00 20000428 [2000US-0561553]
DT - US-P
ACTE- 20000428 US/AE-A
APPLICATION DATA (PATENT)
{US 561553/00 20000428 [2000US-0561553]}
- 20010306 US/BA
PATENT (NO PREVIOUS PRE-GRANT PUBLICATION)
UP - 2001-15

24/45 LEGALI - (C) LEGSTAT
PN - US 6171215 [US6171215]
AP - US 72765/98 19980505 [1998US-0072765]
DT - US-P
ACTE- 19980505 US/AE-A
APPLICATION DATA (PATENT)
{US 72765/98 19980505 [1998US-0072765]}
- 20010109 US/BA
PATENT (NO PREVIOUS PRE-GRANT PUBLICATION)
UP - 2001-14

25/45 LEGALI - (C) LEGSTAT
PN - US 6135923 [US6135923]
AP - US 273861/99 19990322 [1999US-0273861]
DT - US-P
ACTE- 19990322 US/AE-A
APPLICATION DATA (PATENT)
{US 273861/99 19990322 [1999US-0273861]}
- 20001024 US/A
PATENT
UP - 2000-46

26/45 LEGALI - (C) LEGSTAT
PN - US 6126574 [US6126574]
AP - US 66143/98 19980424 [1998US-0066143]
DT - US-P
ACTE- 19980424 US/AE-A
APPLICATION DATA (PATENT)
{US 66143/98 19980424 [1998US-0066143]}
- 20001003 US/A
PATENT
UP - 2000-43

27/45 LEGALI - (C) LEGSTAT
PN - US 6113518 [US6113518]
AP - US 64392/98 19980422 [1998US-0064392]
DT - US-P
ACTE- 19980422 US/AE-A
APPLICATION DATA (PATENT)
{US 64392/98 19980422 [1998US-0064392]}
- 20000905 US/A
PATENT
UP - 2000-39

28/45 LEGALI - (C) LEGSTAT
PN - US 6076571 [US6076571]
AP - US 238214/99 19990127 [1999US-0238214]
DT - US-P
ACTE- 19990127 US/AE-A
APPLICATION DATA (PATENT)
{US 238214/99 19990127 [1999US-0238214]}
- 20000620 US/A
PATENT
UP - 2001-52

29/45 LEGALI - (C) LEGSTAT
PN - US 6066073 [US6066073]
AP - US 66141/98 19980424 [1998US-0066141]
DT - US-P
ACTE- 19980424 US/AE-A
APPLICATION DATA (PATENT)
{US 66141/98 19980424 [1998US-0066141]}
- 20000523 US/A
PATENT
UP - 2001-52

30/45 LEGALI - (C) LEGSTAT
PN - US 6053847 [US6053847]
AP - US 72767/98 19980505 [1998US-0072767]
DT - US-P
ACTE- 19980505 US/AE-A
APPLICATION DATA (PATENT)
{US 72767/98 19980505 [1998US-0072767]}
- 20000425 US/A
PATENT
UP - 2001-52

31/45 LEGALI - (C) LEGSTAT
PN - US 6027431 [US6027431]
AP - US 64368/98 19980422 [1998US-0064368]
DT - US-P
ACTE- 19980422 US/AE-A
APPLICATION DATA (PATENT)
{US 64368/98 19980422 [1998US-0064368]}
- 20000222 US/A
PATENT
UP - 2001-52

32/45 LEGALI - (C) LEGSTAT
PN - US 6027430 [US6027430]
AP - US 946460/97 19971007 [1997US-0946460]
DT - US-P
ACTE- 19971007 US/AE-A
APPLICATION DATA (PATENT)
{US 946460/97 19971007 [1997US-0946460]}
- 20000222 US/A
PATENT
UP - 2001-52

33/45 LEGALI - (C) LEGSTAT

PN - US 5997445 [US5997445]
AP - US 245508/99 19990205 [1999US-0245508]
DT - US-P
ACTE- 19990205 US/AE-A
APPLICATION DATA (PATENT)
{US 245508/99 19990205 [1999US-0245508]}
- 19991207 US/A
PATENT
UP - 2001-52

34/45 LEGALI - (C) LEGSTAT
PN - US 5944638 [US5944638]
AP - US 66142/98 19980424 [1998US-0066142]
DT - US-P
ACTE- 19980424 US/AE-A
APPLICATION DATA (PATENT)
{US 66142/98 19980424 [1998US-0066142]}
- 19990831 US/A
PATENT
UP - 2001-52

35/45 LEGALI - (C) LEGSTAT
PN - US 5938570 [US5938570]
AP - US 914278/97 19970819 [1997US-0914278]
DT - US-P
ACTE- 19970819 US/AE-A
APPLICATION DATA (PATENT)
{US 914278/97 19970819 [1997US-0914278]}
- 19990817 US/A
PATENT
UP - 1999-38

36/45 LEGALI - (C) LEGSTAT
PN - US 5938568 [US5938568]
AP - US 65309/98 19980423 [1998US-0065309]
DT - US-P
ACTE- 19980423 US/AE-A
APPLICATION DATA (PATENT)
{US 65309/98 19980423 [1998US-0065309]}
- 19990817 US/A
PATENT
- 20020319 US/RF
REISSUE APPLICATION FILED
20010817
UP - 2002-14

37/45 LEGALI - (C) LEGSTAT
PN - US 5935046 [US5935046]
AP - US 47641/98 19980325 [1998US-0047641]
DT - US-P
ACTE- 19980325 US/AE-A
APPLICATION DATA (PATENT)
{US 47641/98 19980325 [1998US-0047641]}
- 19990810 US/A
PATENT
UP - 1999-36

38/45 LEGALI - (C) LEGSTAT
PN - US 5919118 [US5919118]
AP - US 991757/97 19971216 [1997US-0991757]
DT - US-P
ACTE- 19971216 US/AE-A
APPLICATION DATA (PATENT)
{US 991757/97 19971216 [1997US-0991757]}
- 19990706 US/A
PATENT
UP - 1999-32

39/45 LEGALI - (C) LEGSTAT
PN - US 5897463 [US5897463]
AP - US 914206/97 19970819 [1997US-0914206]
DT - US-P
ACTE- 19970819 US/AE-A
APPLICATION DATA (PATENT)
{US 914206/97 19970819 [1997US-0914206]}
- 19990427 US/A
PATENT
UP - 1999-21

40/45 LEGALI - (C) LEGSTAT
PN - US 5895339 [US5895339]
AP - US 953308/97 19971017 [1997US-0953308]
DT - US-P
ACTE- 19971017 US/AE-A
APPLICATION DATA (PATENT)
{US 953308/97 19971017 [1997US-0953308]}
- 19990420 US/A
PATENT
- 20000411 US/CC
CERTIFICATE OF CORRECTION
UP - 2000-17

41/45 LEGALI - (C) LEGSTAT
PN - US 5893820 [US5893820]
AP - US 839990/97 19970424 [1997US-0839990]
DT - US-P
ACTE- 19970424 US/AE-A
APPLICATION DATA (PATENT)
{US 839990/97 19970424 [1997US-0839990]}
- 19990413 US/A
PATENT
UP - 1999-20

42/45 LEGALI - (C) LEGSTAT
PN - US 5882281 [US5882281]
AP - US 64393/98 19980422 [1998US-0064393]
DT - US-P
ACTE- 19980422 US/AE-A
APPLICATION DATA (PATENT)
{US 64393/98 19980422 [1998US-0064393]}
- 19990316 US/A
PATENT
UP - 1999-13

43/45 LEGALI - (C) LEGSTAT
PN - US 5803871 [US5803871]
AP - US 839991/97 19970424 [1997US-0839991]
DT - US-P
ACTE- 19970424 US/AE-A
APPLICATION DATA (PATENT)
{US 839991/97 19970424 [1997US-0839991]}
- 19980908 US/A
PATENT
UP - 1998-46

44/45 LEGALI - (C) LEGSTAT
PN - US 5735774 [US5735774]
AP - US 503931/95 19950719 [1995US-0503931]
DT - US-P
ACTE- 19950719 US/AE-A
APPLICATION DATA (PATENT)
{US 503931/95 19950719 [1995US-0503931]}
- 19980407 US/A
PATENT
UP - 1998-26

45/45 LEGALI - (C) LEGSTAT
PN - US 5707321 [US5707321]
AP - US 497377/95 19950630 [1995US-0497377]
DT - US-P
ACTE- 19950630 US/AE-A
APPLICATION DATA (PATENT)
{US 497377/95 19950630 [1995US-0497377]}
- 19980113 US/A
PATENT
UP - 1998-32